



# भारत का राजपत्र

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प्राधिकार से प्रकाशित  
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नई दिल्ली, शनिवार, अक्टूबर 24, 1981 (कार्तिक 2, 1903)

No. 43]

NEW DELHI, SATURDAY, OCTOBER 24, 1981 (KARTIKA 2, 1903)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
(Separate paging is given to this Part in order that it may be filed as a separate compilation)

### भाग III—खण्ड 2

#### [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस  
[Notifications and Notices issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE  
PATENTS AND DESIGNS

Calcutta, the 24th October 1981

APPLICATION FOR PATENTS FILED AT THE HEAD  
OFFICE, 214, ACHARYA JAGADISH BOSE ROAD,  
CALCUTTA-700 017

The dates shown in crescent brackets are the dates claimed  
Under Section 135 of the Act.

17th September, 1981

1035/Cal/81. The Wellcome Foundation Limited and National Research Development Corporation. Synthetic DNA and process therefor. (September 18, 1980) (October 22, 1980) (November 27, 1980) (April 8, 1981).

1036/Cal/81. Pench Steels [A Division of Hope (India) Limited]. Improvements in or relating to steel melting.

1037/Cal/81. Lvovsky Gosudarstvennyy Universitet Imeni I. Franko. Process for forming a reflecting copper coating on a face of a glass substrate.

1038/Cal/81. Avoest-Alpine Aktiengesellschaft. Process for treating iron sponge.

18th September, 1981

1039/Cal/81. Ethicon Inc. Multiple clip applier.

1040/Cal/81. The Continental Group, Inc. Container and closure therefor.

1041/Cal/81. Unie Van Kunstmestfabrieken B. V. Process for reducing the caking and dusting tendencies of urea granules as well as urea granules obtained by this process.

19th September, 1981

1042/Cal 81. R Lorenzo. Improved process for refining and packing of salt and relative machinery for its achievement.

1043 Cal/81. 23. SZ. Allami Epitoipari Vallalat. Process for the production of insulating panel.

1044/Cal/81. Avery-Hardoll Limited. Liquid storage and measurement system.

1045/Cal/81. Toyama Chemical Co. Ltd. Novel cephalosporins, processes for producing the same, intermediates thereof and process for producing the intermediates.

1046/Cal/81. P. V. B. A. Betonkonstruktie V. D. Hemiksem, personenvennootschap met beperkte aansprakelijkheid. Process for producing concrete railway cross-sleepers and elements used for this process.

1047/Cal/81. Italtel Societa Italiana Telecomunicazioni s.p.a. Information management apparatus, for information about alarm and/or reply signals to control and/or autocal control messages, concerning a transit network for time division telecommunication systems.

21st September, 1981

1048/Cal 81. M. A. N. Maschinenfabrik Augsburg-Nürnberg Aktiengesellschaft. Screw expansion machine. (April 10, 1981).

1049/Cal 81. Hi-Max Ltd. Refining process for producing increased yield of distillation from heavy petroleum feedstocks.

1050/Cal/81. Texaco Development Corporation. Ash removal and synthesis gas generation from coal.

1051/Cal/81. V. D. Gobriel, St. Process for extracting oil, protein and flour from fresh coconut meat.

22nd September, 1981

052/Cal/81. Institut Elektrosvariki Imeni E.O. Patona Akademii Nauk Ukrainskoi SSR. Method of electros-lag welding of light metals, forming device and flux therefor.

053/Cal/81. T. C. Agrawalla. An apparatus for preparing ammonia prints.

054/Cal/81. T. C. Agrawalla. Combined electrostatic printing and ammonia printing machine.

055/Cal/81. F. L. Smidth & Co. A/S. Kiln Plant. (September 22, 1980).

23rd September, 1981

1056/Cal/81. Veb Zentrum Fur Forschung Und Technologie Mikroelektronik. Atomizer installation with automated loading device.

1057/Cal/81. Sematra S.A. Machine and method for molding flat articles by compression.

1058/Cal/81. Outokumpu Oy. A hydrometallurgical process for the treatment of a raw material which contains oxide and ferrite of zinc, copper and cadmium.

1059/Cal/81. Outokumpu Oy. A hydrometallurgical process for the recovery of lead, silver, gold and zinc from impure jarosite residues of an electrolytic zinc process.

1060/Cal/81. D. K. Sinha. A new interior accommodation scheme for passenger coaches.

**APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BANCH AT TODI ESTATES (III FLOOR) LOWER PAREL (WFST) BOMBAY-400 013**

5th September, 1981

256/Bom/81. Pantina Murlidhar Rao. Hydro-electric power generation at sea-shores.

257/Bom/81. Hindustan Lever Ltd. Built detergent bars. September 10, 1980).

258/Bom/81. Hindustan Lever Ltd. Built detergent bars. September 10, 1980).

7th September, 1981

259/Bom/81. Eagle Flask Pvt Ltd. An improved storage jar.

8th September, 1981

260/Bom/81. Shriram Bhikali Chitale. Water-tight and leak-proof sealing washer for corrugated roofing sheets and method of manufacturing such sealing washers.

261/Bom/81. Soo-Bong Choi. A portable automatic injecting device.

262/Bom/81. Soo-Bong Choi. A long time continuous operation automatic syringe.

9th September, 1981

263/Bom/81. K. K. Dani. Electric control mats.

10th September, 1981

264/Bom/81. Shreyas Sharadbhai Kinariwala. Improved and modification in winding machine equipped with electro mechanical stop motion.

265/Bom/81. Hindustan Lever Ltd. Water-in-oil emulsions.

**APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002**

17th September, 1981

167/Mas/81. Y. Venkateswarlu. Production of Sodium Formate.

168/Mas/81. Bharat Electronics Ltd. A method of manufacturing Sealant Trap for metal vapours and other contaminants during Liquid Crystal Display/Liquid State Display device processing.

169/Mas/81. C. Y. S. Khan. Duplicating Mis/Composition.

18th September, 1981

170/Mas/81. P. Kandaswami. Solvent Filtm Carbons.

171/Mas/81. A. V. Krushnun. Improvements in or relating to brief.

172/Mas/81. Indian Space Research Organisation. A Process for producing fire retardant rigid polyurethane foam.

**ALTERATION OF DATA**

149324.

11/Bom/81. (Ante-dated August 24, 1979).

149326.

704/Del/80. (Ante-dated May 28, 1977).

149327.

705/Del/80. (Ante-dated May 28, 1977).

149391.

15/Mas/79. (Past-dated February 27, 1980).

**COMPLETE SPECIFICATION ACCEPTED**

Notice is hereby given that any person interested in opposing the grant of patents on any of the applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed along with the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

"The classification given below in respect of each specification are according to Indian Classification and International Classification."

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office.

CLASS 62D.

149310.

Int. Cl.-D06m 1/20.

**A TREATMENT PROCESS FOR TEXTILE SUBSTRATES.**

*Applicants* : SANDOZ LTD., OF LICHTSTRASSE 35, 4002 BASLE, SWITZERLAND.

*Inventors* : PAUL KOMMINOTH TIBOR ROBINSON AND MILICA UROSEVIC.

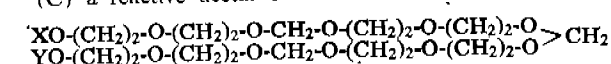
Application No. 527/Cal/78 filed May 16, 1978.

Convention date May 17, 1977/(20689/77) U.K.

Appropriate office for opposition Proceedings (Rule 4. Patents Rules, 1972) Patent Office, Calcutta.

21 Claims.

A treatment process for textile substrates comprising or consisting of regenerated cellulose, which process comprises applying to the substrate by a conventional method an aqueous medium comprising (A) a monomeric, hydrolysis stable, hydrosoluble, resin forming cross linking agent containing at least two-N-methylol or N-alkoxymethyl groups such as herein defined, (B) a hydrosoluble, prepolymerised, linear, filler resin forming, cross-linking agent, also containing at least two N-Methylol or N-alkoxymethyl groups such as herein defined, (C) a reactive acetal of formula I—



wherein X and Y independently, are H or CH<sub>2</sub>OH, D) a

first cross-linking catalyst, being an alkaline earth metal salt or a strong and (E) a second cross-linking catalyst, being an acidic aluminium salt such as herein defined, subsequently drying the substrate and subjecting same to a temperature at which cross-linking takes place.

Comp. Specn. 12 Pages. Drg. 1 Sheet.  
CLASS: 85J & 108C3 & E1. 149311.  
Int. Cl.-C21b 7/10.

IMPROVEMENTS IN OR RELATING TO A METHOD FOR PRODUCING IRON BY DIRECT REDUCTION PROCESS.

*Applicant* : NIPPON STEEL CORPORATION, OF NO. 6-3, 2-CHOME, OTE-MACHI, CHIYODA-KU, TOKYO, JAPAN.

*Inventors* : KATSUYA ONO, TORU WAKABAYASHI, TAKASHI NAKAMURA.

Application No. 551/Cal/78 filed May 23, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 Claims.

In a method for producing iron by direct reduction process, the improvement of cooling high-temperature reduced iron in a cooling zone intergrated with a direction reducing furnace under a high pressure condition, which comprises contacting said high-temperature reduced iron with a hydrogen-containing cooling gas in said cooling zone, the pressure in said cooling zone being 1.5 to 5 kg/cm<sup>2</sup>G said hydrogen-containing cooling gas containing 5-20% by volume of CO<sub>2</sub> and CO in an amount satisfying a condition of CO (%)  $\leq 26.7X - 0.234$ , wherein X is the pressure in said cooling zone.

Comp. Specn. 18 Pages. Drg. 3 Sheets.  
CLASS: 32E & 40F. 149312.  
Int. Cl.-C08f 1/60.

A PROCESS FOR PREPARING POLYMER BEADS.

*Applicant* : ROHM AND HASS COMPANY, OF INDEPENDENCE MALL WEST, PHILADELPHIA, PA 19105, UNITED STATES OF AMERICA.

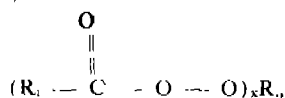
*Inventor* : THOMAS JAMES HOWELL.

Application No. 440/Del/78 filed June 13, 1978.

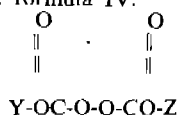
Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Delhi Branch.

9 Claims.

A process of preparing hard, cross-linked discrete copolymer beads by the free-radical polymerisation in an aqueous dispersion of a monomer mixture comprising 50 to 99.5 mole percent of monoethylenically unsaturated monomer and 0.5 to 50 mole percent of cross-linking monomer having at least two active ethylenically unsaturated groups, wherein the polymerisation is conducted in the presence of one or more peroxy catalysts of the formula I.



wherein R<sub>1</sub> is a branched alkyl of 3 to 12 carbon atoms and having a secondary or tertiary carbon linked to the carbonyl group and x is 1 or 2 and when x is 1, R<sub>2</sub> is a branched alkyl radical containing a tertiary carbon attached to the oxygen, and when x is 2, R<sub>2</sub> is n alkylene or aralkylene group, in either case terminating in tertiary carbon atoms attached to the oxygen; or of the formula IV.



wherein Y and Z are the same or different and are lower alkyl, cycloalkyl, alkyl-substituted cycloalkyl or aralkyl groups.

Comp. Specn. 24 Pages. Drg. 1 Sheet.

CLASS 83B<sub>2</sub>. 149313.

Int. Cl.-B27k 9/00.

METHOD OF AND APPARATUS FOR IMPROVING THE FEED VALUE OF VEGETABLE MATTER.

*Applicant & Inventor* : BJØERN ADLER ZEUTHEN BRUNN MAJLUND, OF 9870 SINDAL, DENMARK.

Application No. 679/Cal/78 filed June 20, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

11 Claims.

A method of improving the feed value of vegetable matter, in which the vegetable matter is confined in a flexible gas-tight bag, the bag is then partly evacuated of air, ammonia is then supplied to the bag until the subpressure is at least counterbalanced, and the vegetable matter is subsequently removed from the bag after a specified time.

Comp. Specn. 9 Pages. Drg. 1 Sheet.  
CLASS 36 A1, 50E<sub>2</sub>. 149314.  
Int. Cl.—FO4b-37/04.

Centrifugal Compressor

*Applicants* : CARRIER CORPORATION, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, HAVING ITS PRINCIPAL PLACE OF BUSINESS AT SYRACUSE, NEW YORK.

*Inventors* : DARWIN GEORGE TRAVER, CARL MERLIN ANDERSON, CITIZENS OF THE U.S.A. RESIDING AT 202, WINDSOR DR., DEWITT, NEW YORK, U.S.A. AND 115 CIRCLE ROAD, NEW YORK, U.S.A. AND AMR. NABIH ABDELHAMID RESIDING AT 40 PORT ROYAL, LUZERNE, QUEBEC, CANADA.

Application No. 513/Del/78 filed on 10th July, 1978.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Delhi.

7 Claims.

A centrifugal compressor for increasing the pressure of a compressible fluid including.

a housing defining a fluid path including an inlet opening, an impeller chamber, and a discharge opening,

an impeller rotatably mounted within the impeller chamber to accelerate fluid entering through the inlet opening and to discharge fluid through the discharge opening with increased pressure and velocity,

a collector positioned to receive compressed fluid from the impeller, and

a diffuser extending between the discharge opening and the collector to receive fluid of high velocity and low static pressure from the discharge opening and to supply the fluid to the collector at lower velocity and higher static pressure,

means in the diffuser for absorbing aerodynamic pressure variations in the fluid, said means including a porous material forming a portion of one wall of the diffuser and a resonant cavity in fluid communication with the diffuser through the porous material, whereby pressure variations in the fluid are absorbed in the diffuser to increase the operational flow range of the compressor.

Complete 13 pages, Drawings-4Sheets.

CLASS 140A<sub>2</sub>. 149315.

Int. Cl.-C1 Qm 1/08, 1/38, (3/32, 5/22, 7/36.

PROCESS FOR PREPARING A SULFURIZED COMPOSITION.

*Applicant* : THE LUBRIZOL CORPORATION, 29400 LAKELAND BOULEVARD WICKLIFFE, OHIO 44092 USA.

*Inventors* : KIRK EMERSON DAVIS AND THOMAS FRFDERICK HOLDEN.

Application No. 967/Cal/78 filed September 1, 1978.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

22 Claims. No drawings.

A process for preparing a sulfurized composition which comprises the steps of

- (A) reacting, under superatmospheric pressure,
- (i) at least one unsaturated compound having a non-aromatic carbon-to-carbon unsaturated bond;
- (ii) sulfur; and
- (iii) hydrogen sulfide, wherein the molar ratio (a) of (i) to (ii) is in the range of 1 to from about 0.1 to about 3.0 and the molar ratio (b) of (i) to (iii) is in the range of 1 to from about 0.1 to about 1.5; (b) separating by conventional method from the reaction product of step (A) any low boiling materials; and (C) optionally treating by conventional method the separated product of (B) to reduce active sulfur, whereby the desired sulfurized composition is obtained.

Comp. Specn. 36 Pages.

Drgs. Nil.

CLASS 39E & 55D<sub>2</sub>.

149316.

Int. Cl. CO7f 1/08, 3/02, 3/94, 15/02, 15/04, 15/06.

PROCESS FOR PREPARING FUNGICIDAL METAL-IMIDAZOLE COMPLEXES.

*Applicant* : THE BOOTS COMPANY LIMITED, OF 1 THANE ROAD WEST, NOTTINGHAM, NG 2 3AA, ENGLAND.

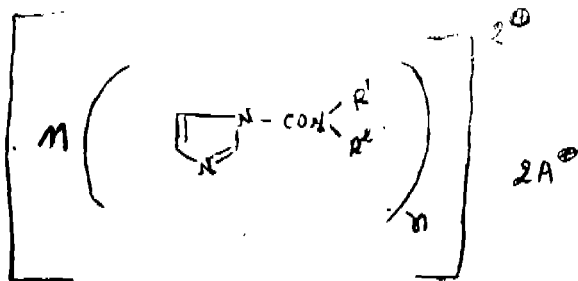
*Inventors* : RICHARD JOHN BIRCHMORE, ROBERT FREDERICK BRÜCKES, LEONARD GEORGE COPPING AND WILFRED HASE WELLS.

Application No. 1066/Cal/78 filed September 25, 1978.

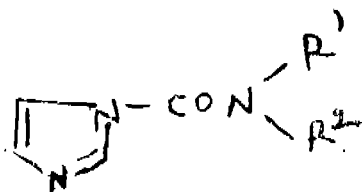
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

8 Claims.

A process for preparing a fungicidal complex compound of a metal salt with an imidazole compound and having the formula shown in Fig. 1.



in which M is a divalent metal cation, R<sup>1</sup> is an alkyl group, R<sup>2</sup> is a benzyl group or a phenoxyalkyl group, the benzyl and phenoxyalkyl groups being optionally substituted in the phenyl ring, n is 2 or 4 and A is a monovalent anion which comprises reacting an imidazole compound of the formula shown in Fig. 2.



wherein R<sup>1</sup> and R<sup>2</sup> have the same meanings as defined above with a metal salt of the formula MA<sub>2</sub> in which M is a divalent metal cation and A is a monovalent anion, in the presence of an organic solvent containing medium.

Comp. Specn. 23 Pages.

Drg. 1 Sheet.

CLASS : 164-C; 201-D.

149317

Int. Cl; C 05f 5/00.

SYSTEM FOR THE CONCENTRATION OF DISTILLERY SPENT-WASH AND METHOD OF DISPOSAL OF SAID SPENT-WASH CONCENTRATE.

*Applicants* : DECCAN SUGAR INSTITUTE, SENAPATI BAPAT MARG, PUNE-411 016, MAHARASHTRA, INDIA,

*Inventors* : 1. AGATARAQ RANGANATH PATIL 2. JAYAKUMAR TATOBA JADHAV AND 3. RAM SURAT DUBEY,

Application No. 289/Bom/1978, filed : Sep. 28, 1978.

Complete specification left after provisional on Sep. 27, 1979.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

12 Claims

System for the concentration of distillery "spent-wash" and method of disposal of said "spent-wash" concentrate comprises of :

(i) generating steam and using it for running a turbo-alternator and utilising the exhaust steam therefrom for evaporation of 'spent-wash' in a multiple-effect evaporator; alternatively, using live steam for re-compressing the vapour from first body of said multiple-effect evaporator into the calandria of the same body by means of a thermo-compressor;

(ii) concentrating 'spent-wash' in a multiple-effect evaporator;

(iii) flashing condensate from one effect to effect of the evaporator set;

(iv) using flash vapour from the last condensate of the multiple effect evaporator to concentrate the product from the evaporator, into a vacuum pan;

(v) utilising the vapours exhausted from the last body of said multiple-effect evaporator set of the system for distillation columns of the distillery for the recovery of alcohol from fermented wash thereby avoiding the use of live steam for the distillation of alcohol; and

(vi) mixing 'spent-wash' concentrate with an absorbent material like dry bagacillo or dry filter-mud (both of which are obtained as by products in a cane-sugar factory) and which is convenient for handling, transport and disposal.

Provisional specification 9 pages.

Drawing sheets-4.

Complete specification 13 pages.

Drawing sheet-1.

CLASS : 194C, 98-I & 206E.

149318.

Int. Cl. : H01s & F24i.

"SOLAR CELL ARRAY."

*Applicants* : PHOTON POWER, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 10767 GATEWAY WEST, EI PASO, TEXAS 79935, UNITED STATES OF AMERICA.

*Inventors* : (1) JOHN F. JORDAN & (2) CURTIS M. LAMPKIN.

Application No. 711/Del/78 filed October 3, 1978.

Convention date May 26, 1978/(22915/78) U.K.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Delhi Branch.

26 Claims.

A method of forming an electrically series connected array of photovoltaic cells mounted on a common vitreous substrate initially having substantially the entirety of a selected surface of said substrate covered with a first film of a transparent and electrically-conductive material, comprising the steps of :

applying at least one layer of a semiconductor material as a second film overlying said first film.

selectively removing portions of said first film before or after removing portions of said second film to form a

plurality of individual photovoltaic cells spaced apart on said vitreous substrates, and

thereafter applying an overlying layer of another different electrically-conductive material on to said cells and substantially over the entirety of said selected surface of said substrate and separating said overlying different conductive material into individual conductors in such manner as to interconnect said cells into an electrically series connected array.

Complete Specification 36 pages and drawing 2 Sheets.

CLASS 186.B. 1. 149319.

Int. Cls. HO41-1/00.

"A DIRECTIONAL COUPLER".

*Applicants* : A/S ELEKTRISK BUREAU.

*Inventors* : HAKEN EINAR BJORN, BJORN HENNING RAAD.

Application No. 766/DEL/78 Filed October, 17, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Municipal Market, Saraswati Maig, Karol Bagh New Delhi-110005.

11 Claims.

A directional coupler for duplex transmission including a device for providing a correction signal and a compensation circuit (KK) to which said correction signal is applied for suppression of that portion of the received signal which is caused by the signal from own transmitter, characterized in that the device includes a memory unit (HUK) with stored values of the correction signal, said values being assigned to the different, within a selected period of time, possible variants of time functions coming from own transmitter (S<sub>1</sub>), and a decoder (ADR) connected between said transmitter and the memory unit (HUK), for detection of actual, transmitted signal variants, said decoder (ADR) including means for selection in the memory unit (HUK) of the values of the correction signal assigned to the actual signal variants and that the compensation circuit (KK) is connected to the memory unit (HUK) for utilization of the assigned values as correction signal.

Complete Specification 16 pages Drawings 8 Sheets.

CLASS 195E & G. 149320.

Int. Cl.-F 16k 21/00.

IMPROVED VALVE UNIT FOR FLUID PRESSURE REGULATORS PARTICULARLY GAS PRESSURE REGULATORS.

*Applicant* : INDIAN OXYGEN LIMITED, OF OXYGEN HOUSE, P-34, TARATALA ROAD, CALCUTTA-700 053, WEST BENGAL, INDIA.

*Inventor* : RANAJIT BANDYOPADHYAY.

Application No. 245/Cal/78 filed March 7, 1978.

Complete Specification left May 5, 1979.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

10 Claims

An improved valve unit for a fluid pressure regulator particularly gas pressure regulator comprising a valve body provided with a centrally disposed hole or aperture of predetermined diameter and depth to accommodate a pin and adapted to be seated against a nozzle in the normal position and connectable in operation to a threaded adjusting member, for creating and adjusting a gap between a resilient seat provided on the valve body and the mating surface of the nozzle, for passage of fluid flow through said gap at a predetermined rate depending on the desired rate of fluid flow, characterised in that the seating surface of said valve body is adapted to receive said resilient seat thereon whereby any secondary flow of fluid is prevented through the valve body and the seat in the fully closed position of the valve body in relation to said nozzle, the mating surface of said nozzle providing the lowest gap between the central part of said mating surface surrounding the central orifice of the nozzle and the resilient valve seat in the closed position in relation to the nozzle.

Com. Specn. 20 Pages

Drg. 1 Sheet.

CLASS : 9D.

149321.

Int. Cl. : C22c39/00

"A METHOD FOR MANUFACTURING A LOW-ALLOY HIGH-SPEED STEEL."

\**Applicants* : FAGERSTA AKTIEBOLAG, A SWEDISH COMPANY RESIDING AT FACK, S-773 01 FAGERSTA, SWEDEN.

*Inventors* : (1) BJORN FREDRIKSSON AND (2) BENGT WADELL.

Application No. 767/Del/78 filed October 17, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Delhi Branch.

7 Claims.

Method for manufacturing a low-alloy high-speed steel, characterized by mixing in a conventional manner in percent by weight of 0.90-1.05% C, 0.10-1.00% Si, 2.0-4.5% Cr, 4.0-6.0% Mo, 1.0-2.0% W, 1.0-2.0% V, 1.0-6.0% Co, 0.02-0.08% N, and upto 0.060% S, the remainder comprising mainly iron and minor content of impurities and other than above mentioned alloying elements normally occurring in steels.

Complete Specification 12 Pages and Drawing 1 Sheet.

CLASS 24F. 149322.

Int. Cl. B 60t 13/44.

A SERVO BOOSTER ASSEMBLY FOR A VEHICLE BREAKING SYSTEM.

*Applicant* : LUCAS INDUSTRIES LTD., GREAT KING STREET, BIRMINGHAM 19, ENGLAND.

*Inventors* : (1) ALAN GEOFFREY DIXON

(2) JOHN PETER APPELBOAM.

Application No. 202/Mas/79 filed November 8, 1979.

Convention date : 14-11-1978 (No. 44355/78 United Kingdom).

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Madras.

7 Claims.

A servo booster assembly of the kind set forth in which a valve body is provided with an axial bore in which works a valve control member and with a portion of non-round transverse cross-section, a diaphragm support plate is provided with a non-round central aperture to enable the plate to be passed over said portion but to be retained against rearward movement after being turned relative to said portion, and the valve body is provided with a substantially transversely extending recess within which is received a key having a lost-motion connection with the valve control member and cooperating with the diaphragm support plate to prevent it from turning relative to said portion to a position in which the plate can pass over said portion, means being provided to retain the key in position.

Com.-16 pages;

Drwgs.-4sheets.

CLASS 32 A2. 149323.

Int. Cl.-co9 b-1/00.

A PROCESS FOR THE PREPARATION OF WATER INSOLUBLE ANTHRAQUINONE DYESTUFF COMPOSITIONS.

*Applicants* : COLOUR-CHEM LIMITED AN INDIAN COMPANY, RAVINDRA ANNEXE, DINSHAW VACHHA ROAD, CHURGHGATE RECLAMATION, BOMBAY-400020, MAHARASHTRA, INDIA.

*Inventor* : KIRTIKUMAR JAGMONANDAS DIVECHA.

Application No. 32/BOM/79 filed on Jan. 30, 1979.

Comp. Specn. after prov. left on Jan. 30, 1980.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

2 Claims.

1. A process for the preparation of water-insoluble anthraquinone dyestuff compositions comprising (1) anthraquinone

dyestuff containing sulfonic acid ester (80-90%) and (2) anthraquinone dyestuff containing sulfonamide groups (10-20%) and such dyestuffs being represented by the general formulae (I) and (II) respectively shown in the accompanying drawings, in which

R represents phenyl radical or a phenyl radical which is mono-substituted with alkyl, alkoxy, arylalkyl, cycloalkyl radical or a halogen atom such as chlorine or bromine atom;

R<sub>1</sub>, R<sub>2</sub> may be same or different and represent alkyl, aryl, arylalkyl, cycloalkyl, hydroxyalkyl or alkoxyalkyl substituent or when one of R<sub>1</sub> & R<sub>2</sub> represents a hydrogen atom the other one represents any one of the aforementioned groups for R<sub>1</sub> & R<sub>2</sub>.

X represents a hydrogen atom, a hydroxy group, or a -NH<sub>2</sub> group or low molecular weight alkylamino group, such as -NHCH<sub>3</sub>, or -NHC<sub>2</sub>H<sub>5</sub>;

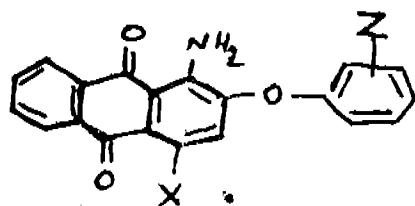
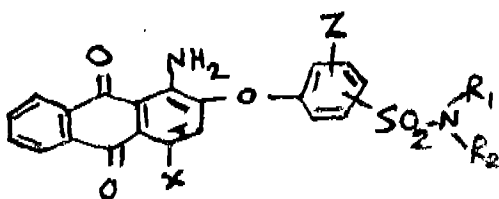
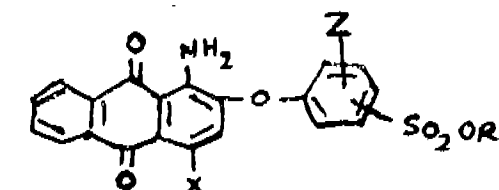
Z represents a hydrogen, a halogen such as chlorine, or bromine, a linear or branched saturated aliphatic hydrocarbon group, such as a methyl, ethyl, isopropyl, n-butyl, or tert-butyl group, or a low molecular weight alkoxy group, such as methoxy or ethoxy group; which comprises reacting 1-aminoanthraquinone derivative of general formula (III) of the accompanying drawings, wherein X and Z have the meaning given above, with an excess of chlorosulfonic acid, at temperatures between 15°C and 30°C, to obtain corresponding sulfonic acid chloride of general formula (IV) of the accompanying drawings, wherein X and Z have the same meanings as given above, and then reacting as herein described to the extent of at least 70% but not more than 75% with phenol such as shown in collective formula (V) of the accompanying drawings in presence of an acid binding agent, as herein described, at temperatures ranging from 0-100°C, preferably between 10°C and 60°C, between the pH value of 3 and 9.5, followed by completing the reaction of the residual sulfonic acid chloride with an aromatic or aliphatic amine such as shown in collective formula (VI) of the accompanying drawings at a temperature of 70-75°C and pH 8.5 to 9.5.

Provisional Specification. 2 pages.

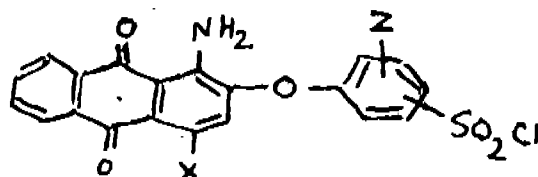
Drawing 1 Sheet.

Complete Specification. 11 pages.

Drawings 2 Sheets.



III



IV

CLASS : 28C + 180.

149324.

Int. Class : F24C 3/02.

"A BURNER FOR GAS STOVE OR THE LIKE COOKING AND HEATING RANGE AND A GAS STOVE OR THE LIKE COOKING AND HEATING RANGE INCORPORATING THE SAME.

Applicant : INDIAN OIL CORPORATION LIMITED 254-C, DR. ANNIE BESANT ROAD PRABHADEVI, BOMBAY-400 025, MAHARASHTRA, INDIA.

Inventors : (1) DR. RAJ KUMAR GUPTA,  
(2) ASHOK KUMAR MEHTA AND  
(3) RAMESH KUMAR PAULASTYA.

Application No. 11/Bom/1981, filed on Jan. 12, 1981.

Division of application No. 160/Bom/1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay Branch.

9 Claims.

A burner for gas stove or the like cooking and heating Range comprising a base provided with an inlet for gas, a vertical mixing tube, means for connecting the lower end of the said tube with base, means for ejecting the gas into the tube provided at the upper end of the base, and a burner top connected to the upper end of the mixing tube and provided with a plurality of gas ports arranged towards the periphery leaving in the centre a continuous portion without any gas ports.

Complete specification : 9 pages.

Drawings 2 Sheets.

CLASS 205G & H1.

149325.

Int. Cl.-B60c 5/12, 11/00, 15/00, 29/00.

IMPROVEMENTS TO TYRE AND WHEEL RIM ASSEMBLIES.

Applicant : DUNLOP LIMITED, OF DUNLOP HOUSE, RYDER STREET, ST. JAMES'S, LONDON, S.W.1, ENGLAND.

Inventors : TOM FRENCH, THOMAS HOLMES, WILLIAM ERIC MITCHELL AND MICHAEL JOHN KENNEY.

Application No. 805/Cal/77 filed May 28, 1977.

Convention date June 4, 1976/(23099/76) U.K.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

23 Claims.

A tyre and wheel rim assembly wherein the tyre comprises a tread portion sidewalls and a pair of beads each containing a substantially inextensible annular reinforcement and being seated upon a bead seat one at each side of the wheel rim; the wheel rim including a tyre fitting well and being formed axially inward of and adjacent to at least one bead seat to provide a circumferentially extending groove which axially and radially locates at least the radially inward extremity or tip of an extended toe portion of the associated tyre bead, the said toe portion comprising elastomeric material, extending lengthwise from the annular reinforcement to the tip in a direction radially and axially inwards of the annular reinforcement, being flexible in a direction perpendicular to its length to allow tyre fitting and being substantially rigid in the direction of its length such that when an axially inward force at the tread portion is applied to the bead by the tyre sidewall in the ground contacting portion of the tyre circumference, a substantial radially and axially outwardly directed force is

generated at the annular reinforcement the generated force lighting the annular reinforcement and retaining the bead.

Comp. Specn. 26 Pages.

Dr. 13 Sheets.

CLASS 205G & H & I.

149326.

Int. Cl.-B60c 5/00, 11/00, 15/00, 29/00.

IMPROVEMENTS IN WHEEL RIMS FOR TUBELESS PNEUMATIC TYRES.

*Applicant* : DUNLOP LIMITED, OF DUNLOP HOUSE, RYDER STREET, ST. JAMES'S, LONDON, S.W.1., ENGLAND.

*Inventors* : TOM FRENCH, THOMAS HOLMES, WILLIAM ERIC MITCHELL AND MICHAEL JOHN KENNEY.

Application No. 704/Del/80 filed September 29, 1980.

Convention date June 4, 1976/(23099/76) U.K.

Division of Application No. 805/Cal/77 filed May 28, 1977.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Delhi Branch.

19 Claims.

A one-piece wheel rim for a tubeless pneumatic tyre wherein the radially outer profile of the wheel rim considered in a plane containing the axis of the wheel rim comprises in sequence from one edge of the wheel rim comprises in sequence from one edge of the wheel rim profile : a bead retaining flange; a substantially straight bead seating portion which tapers radially inwardly towards the axially inner region of the wheel rim; an open bead toe locating groove immediately adjacent to said bead seating portion formed by again in sequence :—a radially inwardly curving axially outer groove side portion; and outwardly concave groove based portion and a radially inwardly curving axially inner groove side portion; a substantially straight flat ledge portion; a tyre-fitting well portion having a base diameter substantially smaller than the ledge portion and arranged to allow tyre-fitting over the bead retaining flange; a second open bead toe locating groove formed by, again in sequence :—a radially inwardly curving axially inner groove side portion; an outwardly concave groove base portion; and a radially inwardly curving outer groove side portion; a substantially straight bead seating portion which tapers radially inwardly towards the axially inner region of the wheel rim; and a bead retaining flange.

Comp. Specn. 13 Pages.

13 Drawings.

CLASS 205G & H & I.

149327.

Int. Cl.-B60c 5/00, 11/00, 15/00, 29/00.

A TYRE FOR A TYRE AND WHEEL RIM ASSEMBLY.

*Applicant* : DUNLOP LIMITED, OF DUNLOP HOUSE, RYDER STREET, ST. JAMES'S LONDON, S.W.1., ENGLAND.

*Inventors* : TOM FRENCH, THOMAS HOLMES, WILLIAM ERIC MITCHELL AND MICHAEL JOHN KENNEY.

Application No. 705/Del/80 filed September 29, 1980.

Convention date June 4, 1976/(23099/76) U.K.

Division of Application No. 805/Cal/77 filed May 28, 1977.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Delhi Branch.

12 Claims.

A tyre for a tyre and wheel rim assembly comprising a tread portion, sidewalls, and a pair of beads each containing a substantially inextensible annular reinforcement and an extended toe portion comprising elastomeric material and projecting axially and radially inwards of said tyre bead, said toe portion being flexible in a direction substantially perpendicular to its length and to be substantially rigid in the direction of its length.

Comp. Specn. 34 Pages.

Dr. 13 Sheets.

CLASS 97H & 130G.

149328.

Int. Cl.-C22b 9/12, F27b 15/00, 16/06.

APPARATUS FOR REFINING MOLTEN METAL.

*Applicant* : UNION CARBIDE CORPORATION, AT 270 PARK AVENUE, NEW YORK, STATE OF NEW YORK, 10017, UNITED STATES OF AMERICA.

*Inventors* : ANDREW GAZA SZFKELY.

Application No. 1258/Cal/77 filed August 12, 1977.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

9 Claims.

Apparatus for refining molten metal comprising, in combination : (A) a vessel comprising (a) an insulating refractory shell having side walls and a bottom wall and being impervious to molten metal; (b) a lining for a major proportion of that interior surface of said side walls and bottom wall, which surface will be below the surface of the melt, said lining comprising graphite or silicon carbide blocks, which blocks (i) are positioned so that said blocks will come in contact with the melt, and (ii) are free to expand in at least two directions in response to the application of heat; and (c) at least one electric resistance heating element disposed within any of the blocks, which comprise the lining for a side wall, said element being nonfixedly attached to, and not in electrical contact with, the block within which it is disposed; (B) at least one rotating gas distributing means disposed in said vessel; and (C) inlet and outlet means for molten metal and gases.

Comp. Specn. 19 Pages.

Dr. 3 Sheets.

CLASS 70B.

149329.

Int. Cl.-B01k 3/10.

MONOPOLAR MEMBRANE ELECTROLYTIC CELL.

*Applicant* : DIAMOND SHAMROCK CORPORATION, OF 1100 SUPERIOR AVENUE, CLEVELAND, OHIO, UNITED STATES OF AMERICA.

*Inventors* : GERALD REUBEN PHOTO, MICHAEL JOSEPH KUBRIN, AND ROBERT CARL SUTTER.

Application No. 1576/Cal/77 filed November 2, 1977.

Convention date August 23, 1977/(28142/77) AUSTRALIA.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

23 Claims.

A monopolar membrane electrolytic cell, which comprises two end electrode pans of identical configuration and each having a peripheral flange therearound, at least one end electrode element connected to the interior depression of each of the pans, a central electrode frame having on each side thereof a peripheral flange arranged to match the peripheral flange of the corresponding end electrode pan, at least one central electrode element bifurcated (as defined herein) so that each part presents a substantially planar surface to the one or more electrode elements of the corresponding end electrode, a membrane separating the one or more electrode elements of each end electrode from the central electrode element when the cell is assembled, current distributor for supplying electrical energy of opposite polarity to the one or more central electrode elements and the end electrode elements and at least one access port in each compartment for adding materials or removing products.

Comp. Specn. 28 Pages.

Dr. 5 Sheets.

CLASS 113-1

149330

Int. Cl.-B60c 1/34.

IMPROVED ARRANGEMENT OF FLASHING DIRECTION INDICATORS FOR A TWO-WHEELED MOTOR VEHICLE

*Applicant* : PIAGGIO & C S P A, OF VIA ANTONIO CECCHI 6 GENOVA ITALY

*Inventors* : BRUNO GADDI.

Application No. 45/Del/78 filed January 18, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Delhi Branch

5 Claims.

An improved arrangement of flashing direction indicators for a two-wheeled motor vehicle of the kind having a front apron and a pair of rear motor cowlings wherein a pair of flashing direction indicators are incorporated in the front apron and a pair of rear flashing direction indicators are incorporated one in each of the motor cowlings, characterised in that each front indicator comprises a hollow body connected to the rear of the front apron behind an aperture provided therein and housed within a glove box provided at the rear of such front apron, a refractor transparent cover being located over such aperture externally of the front apron and each rear indicator also comprises a hollow body connected to and housed within each respective motor cowl behind an aperture provided therein, a refractor transparent cover being located over each such aperture externally of the motor cowl.

Comp. Specn. 5 Pages.

Drg. 3 Sheets.

CLASS 94G.

149331.

Int. Cl.-B02c 2/00.

A METHOD OF CRUSHING LUMPS OF MATERIAL BY MEANS OF A CRUSHER.

*Applicant* : KOBE STEEL, LTD., OF 3-18, 1-CHOME, WAKINOHAMA-CHO, FUKUAI-KU, KOBE-CITY, JAPAN.

*Inventors* : HIROYUKI MURATA AND TAKESHI TANAK.

Application No. 173/Cal/78 filed February 15, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

15 Claims.

A method of crushing lumps of material by means of a crusher in which a crushing member and a fixed member define a crushing chamber and a distance between said crushing member and said fixed member is so changed as to produce a crushed product not exceeding 13 mm, which comprises :

moving said crushing member against said fixed member, and feeding said lumps of material into said crushing chamber at a sufficient rate to keep said crushing chamber constantly impregnated with said material.

Comp. Specn. 19 Pages.

Drg. 2 Sheets.

CLASS 127-I.

149332.

Int. Cl.-F16d 3/16.

A BEARING SYSTEM FOR A UNIVERSAL JOINT.

*Applicant* : GELENKWELLENBAU GMBH, WESTENDH OF 7-9 4300 ESSEN 1, FEDERAL REPUBLIC OF GERMANY.

*Inventor* : JOSEF SCHULTENKAMPER.

Application No. 178/Cal/78 filed February 16, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

3 Claims.

A bearing system for a universal joint comprising a cross trunnion bearing pins extending outwardly from said trunnion for journaling a joint member, a journal for each of said

trunnion bearing pins, at least two of said journals mounted on said joint member for receiving one pair of axially aligned said bearing pins, projecting means carried on each of said journals for cooperative engagement with said joint member for preventing radial and lateral displacement of said journal with respect to said joint member, wherein the improvement comprises an axially elongate seating bore in each of said journals for receiving therein one of said trunnion bearing pins, said seating bore extending axially through said journal having an open first end and an open second end and with said seating bore having a uniform axial length around the circumference thereof, a thin-walled bearing bushing carried in each said seating bore and extending through said first end and spaced inwardly from said second end, said bushing having a bottom wall extending transversely across said seating bore between the front and second ends of said bore and forming a closure therefor and side walls extending from said bottom wall outwardly from said first end of said bore, roller bearings positioned within said bushing and said trunnion pin received therein, said roller bearings spaced inwardly from the end of said side walls extending outwardly from said first end of said bore in an annular groove in said seating bore, a removable guard ring seated in said annular groove and in engagement with the bottom wall of said bushing for retaining said bushing in its respective seating bore, said thin walled bearing bushing having said bottom wall thereof thicker than the side walls for absorbing forces generated during rotation of said joint, and a sealing ring located within said bushing and extending around said side walls from the end of said bushing located outwardly from said first end of said bore to said roller bearings.

Comp. Specn. 12 Pages.

Drg. 4 Sheets.

CLASS 32F<sub>2</sub>b & 55E.

149333.

Int. Cl.-C07c 1/20, A61k 27/00.

A PROCESS FOR REPARATION PYRIDYL-PIPERAZINE.

*Applicant* : RICHER GEDEON VEGYESSETI GYAR RT. OF 21 GYOMROI U., BUDAPEST X., HUNGARY.

*Inventors* : ARPAD MOLNAR, DR. KAROLY FELFOLDI, DR. MIHALY BARTOK, DR. EGON KARPATI AND DR. LASZLO SZPORNY.

Application No. 181/Cal/78 filed February 17, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

3 Claims. No. drawings.

A process for the preparation of 3-[4-(2'-pyridyl)-piperazin-1-yl]-1-(3, 4, 5-trimethoxy-benzoyloxy)-propane and pharmaceutically acceptable acid addition salts thereof, which comprises reacting 3-[4-(2'-pyridyl)-piperazin-1-yl]-1-hydroxypropane with 3, 4, 5-trimethoxy-benzole acid or with a reactive derivatives such as the acid-anhydride, the acid halides or esters thereof in an inert anhydrous organic solvent, such as benzene, toluene or xylene, in an aliphatic ketone such as acetone, methyl-isobutyl ketone or in an aliphatic alcohol having 1 to 5 carbon atoms, and converting, if desired, the obtained product into a pharmaceutically acceptable acid addition salt.

Comp. Specn. 11 Pages.

Drgs. Nil.

CLASS 154D & I & 187H.

149334.

Int. Cl.-B41f 17/00, 23/00, B41j 25/00, 29/00.

A KEYBOARD OPERATED PRINTING MACHINE.

*Applicant* : SIEMENS AKTIENGESellschaft, OF BERLIN AND MUNICH, WEST GERMANY.

*Inventors* : GUNTHER VORBACH AND ALBERT CHOCHOLATY.



Application No. 473/Cal/78 filed May 2, 1978.

Convention date September 1, 1971/(36437/77) U.K.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 11 Claims.

A keyboard operated printing machine comprising a supporting and restraining device arranged at a side of the machine whereby a sheet of paper can be held only along one edge thereof in a manner such that the paper is curved in sections perpendicular to the line printing direction of the machine, said device being formed by a substantially horizontal face of a casing of the machine and a supporting member extending in its working position obliquely upwards at an obtuse angle to said face and being provided with restraining means.

Comp. Specn. 11 Pages.

Drg. 3 Sheets.

CLASS 182C.

149335.

Int. Cl.-C13k 1/02.

#### PROCESS FOR PREPARING STARCH HYDROLYZATE.

Applicant : MEIJI SEIKA KAISHA, LTD., OF 4-16, KYOBASHI 2-CHOME, CHUOKU, TOKYO, JAPAN.

Inventors : TAKASHI ADACHI, TETSUO NAKAMURA, HIDEMASA HIDAKA.

Application No. 689/Cal/78 filed June 22, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 4 Claims. No. drawings.

A method of preparing the starch hydrolyzate comprising glucose, maltose, maltotriose, maltotetraose, maltohexaose, maltoheptaose, maltooctaose and a minor amount of dextrin, as the solid content of said hydrolyzate wherein the starch hydrolyzate contains : upto 10% by weight of glucose, at least 72% by weight of totally maltose and maltotriose, lower than 70% by weight of maltose, and upto 20% by weight of totally dextrin, as herein described and the oligosaccharides, as herein described as high as and higher than maltotetraose as calculated on the whole weight of said solid content, and also contains water as the other constituent of the hydrolyzate than said solid content, and that is shows a viscosity of upto 2,000 cps. When determined at a temperature of 25°C in respect of the starch hydrolyzate where the concentration of the solid content in the hydrolyzate is 75% by weight based on the whole weight of the hydrolyzate which comprises taking a liquefied starch obtained by method as herein described and saccharifying it by treating this at a temperature of 60-65°C and a pH of 5.0-7.0 with a *Streptomyces* amylase as herein described having such enzymatic activities and characteristics that the pH of the optimum activity is in the range of 4.5-5.0 for starch substrate, the limit in the hydrolysis of starch by this enzyme is no more than 75% of the theoretical maltose and the ratio of glucose to maltose produced from starch by the action of this enzyme is no more than 0.06:1 by weight and concentrating the resulting starch hydrolyzate to a water content of 40% to 5% by weight based on the whole weight of the starch hydrolyzate.

Comp. Specn. 31 Pages.

Drgs. Nil.

CLASS 40F & 139A.

149336.

Int. Cl.-C09c 1/48, B01j 1/00.

#### METHOD AND APPARATUS FOR THE MANUFACTURE OF CARBON BLACK.

Applicant : CONTINENTAL CARBON COMPANY, OF 2120 SOUTHWEST FREEWAY, HOUSTON, TEXAS, 77027, U.S.A.

Inventors : KAREL RENE DAHMEN, AND JOHN MADISON CLAY.

Application No. 694/Cal/78 filed June 23, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 7 Claims.

A process for manufacturing carcass grades of oil furnace carbon black in which a carbon black feedstock is introduced into an elongate reactor into a reaction zone heated by hot

combustion gases from the burning of a fuel with air, characterized in that it comprises swirling at least a portion of the air before it contacts the fuel and controlling the swirl Ratio of the air so as to control the structure of the resulting carbon black, said Swirl Ratio being controlled within the values wherein an increase in Swirl Ratio results in an increase in structure and a decrease in Swirl Ratio results in a decrease in structure wherein the Swirl Ratio, S is defined as :

$$S = \frac{1}{1 - \Psi} \frac{\tan \delta}{1 + \tan \delta \tan (180/z)}.$$

Where

$$\Psi = zt/2WRI \cos \delta$$

$\delta$  = angle of vane of radius

$R_i$  = radius of inner diameter of vane cascade, inches

$t$  = thickness of vanes, inches

$z$  = number of vanes.

Comp. Specn. 14 Pages.

Drg. 2 Sheets.

CLASS 63A<sub>1</sub> & B<sub>1</sub>.

149337.

Int. Cl.-H01r 11/00.

#### A DEVICE FOR SEPARATING AND POSITIONING INDIVIDUAL WIRES OF A MULTIPLE CONDUCTOR CABLE.

Applicant : MINNESOTA MINING AND MANUFACTURING COMPANY, OF 3M CENTER, SAINT PAUL, MINNESOTA 55101, UNITED STATES OF AMERICA.

Inventors : LYLE RAY ANDERSON AND DONALD FRANK MILLER AND RALPH FRANCIS WICKENBERG.

Application No. 754/Cal/78 filed July 7, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 6 Claims.

A device for separating and positioning individual wires of a multiple conductor cable in a fixed relationship over the base (7) of a splice connector wherein an elongate insulative body member (5) is adapted to receive a base of a splice connector and isolated wires (18) from a multi-conductor cable, said body member having an upper (10) and lower (11) surface and a first (9) and second (8) edge on said upper surface, and an insulative cap member (23) is formed to mate with said body member, said body member has a plurality of spaced projections (14, 15) on said upper surface along said first and second edges to define a plurality of parallel transverse aligned wire receiving channels (16, 17) along said edges for receiving and holding said individual wires in substantially parallel alignment, said body member has a plurality of strain relief recesses (26) formed in said upper surface of said body member and located within said wire channels along said first edge said body member and said cap member have a plurality of alignment means (25, 27) for aligning said cap member with said body member, said cap member has spaced wire pusher members (24) aligned one with each of said recesses to co-operate with said recesses for bending and binding said individual wires at said recesses, and retaining members (25, 27) are provided to secure said cap member on said body member.

Comp. Specn. 10 Pages.

Drg. 1 Sheet.

CLASS : 32B.

149338.

Int. Cl.-C07C 7/02.

#### "PROCESS FOR SEPARATING ETHYLENE FROM A HYDROCARBON FEED GAS MIXTURE."

Applicants : UNION CARBIDE CORPORATION, LOCATED AT 270 PARK AVENUE, NEW YORK, STATE OF NEW YORK 10017, UNITED STATES OF AMERICA.

Inventors : JAMES STEPHEN DAVIS.

Application No. 561/Del/78 filed July 31, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Delhi Branch.

#### 12 Claims.

A process for separating ethylene from a hydrocarbon feed gas mixture comprising at least C<sub>1</sub>—C<sub>2</sub> constituents comprising the steps of :

- (a) providing said hydrocarbon feed gas mixture at super atmospheric pressure between 200 and 700 psia, cooling same to condense a first liquid fraction

comprising at least C<sub>1</sub>-C<sub>2</sub> constituents, and separating said first liquid fraction from the uncondensed gas;

- (b) fractionating the first liquid fraction in a demethanizer column at superatmospheric pressure of 100 to 35 psia to recover a demethanizer overhead comprising methane and a demethanizer bottoms comprising at least C<sub>3</sub> constituents;
- (c) fractionating the demethanizer bottoms to recover ethylene as overhead product and ethane bottoms;
- (d) further cooling the uncondensed gas of step (a) at high superatmospheric pressure of at least 350 psia to condense a second liquid fraction comprising C<sub>1</sub>-C<sub>2</sub> constituents and separating the second liquid fraction from the uncondensed further cooled gas;
- (e) throttling the second liquid fraction to low superatmospheric pressure below 200 psia;
- (f) mixing the throttled second liquid fraction with the demethanizer overhead to form a fluid mixture comprising C<sub>1</sub>-C<sub>2</sub> constituents;
- (g) stripping C<sub>3</sub> constituents from said fluid mixture by methane-containing vapor in a stripping zone to recover methane-rich vapor overhead and bottoms liquid containing methane and C<sub>3</sub> constituents;
- (h) partially vaporizing said stripping zone bottoms liquid to form said methane-containing vapor for said stripping zone;
- (i) separating the unvaporized stripping zone bottoms liquid from said vaporized methane-containing vapor and passing the latter to said stripping zone as said methane-containing vapor therefor; and
- (j) passing the unvaporized stripping zone bottoms liquid to said demethanizer column for fractionation therein with said first liquid fraction.

Complete Specification 62 pages and Drawings 4 Sheets.

CLASS 95-1.

149339.

Int. Cl.-B25b 7/00.

#### COMPOUND PIVOT PLIER-TYPE TOOL.

*Applicant* : UTICA TOOL COMPANY, INC., OF CAMERON ROAD, ORANGEBURG, SOUTH CAROLINA, U.S.A.

*Inventor* : FRED WILLIAM NORD IN.

Application No. 1190/Cal/78 filed November 3, 1978.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

11 Claims.

A compound pivot, pliers-type tool having readily replaceable jaws comprising a pair of handles, a pair of parallel spaced mounting plates, means mounting said handles between said plates for pivotal movement about spaced parallel axes perpendicular to said plates, a pair of jaws each having a mounting portion extending between said plates and a work performing portion extending outwardly beyond said plates, means mounting said jaws between said plates for pivotal movement relative to said plates and holding said jaws and plates in assembled relation, said last named means including readily removable means removable to permit easy replacement of said jaws, said means mounting said jaws between said plates being so constructed and arranged that upon removal of said removable means said jaws may be readily removed from said tool, and cooperating engaging means on said handles and on said jaws for operating said jaws in response to movement of said handles.

Comp. Specn. 17 Pages.

Drg. 4 Sheets.

CLASS 111, 203.

149340.

Int. Cl.-B65d 83/00.

#### DISPENSER FOR A MATERIAL WOUND INTO A HOLLOW, CYLINDRICAL, SELF-SUPPORTING ROLL.

*Applicants* : OSCAR PABLO FINKELSTEIN, 14/18 EIN ROGEL ST., JERUSALEM, ISRAEL.

Application No. 68/BOM/1979 Filed March 5, 1979.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Bombay.

12 Claims.

A dispenser for sheet material wound into a hollow, coreless, cylindrical, self-supporting roll contained therein wherein the dispenser comprises a wall portion adjacent to the circumference of the roll and two ends adjacent to the end faces of said roll, said wall portion being provided with at least one first elongated aperture means through which the material, unwindable from the outside of said cylindrical roll, can be drawn from said dispenser, and wherein at least one of the two dispenser ends adjacent to the end faces of said roll is provided with second aperture means through a central zone of which passes the roll axis, through which second aperture means the material, unwindable from the inside of said roll, can be drawn from said dispenser.

Comp. Specn. 12 Pages.

Drawing Sheet 1.

CLASS 53C.

149341.

Int. Cl.-B62k 23/08.

#### AN IMPROVED DRIVE SYSTEM FOR A CYCLE.

*Applicant & Inventor* : VASUDEVAN BHASKARAN NAIR, MARUTHARA VEEDU, CHIRAYINKIL P.O., TRIVANDRUM DIST., KERALA.

Application No. 15/Mas/79 filed January 29, 1979.

Complete specification left February 27, 1980.

Post dated to February 27, 1980.

Appropriate office for opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

5 Claims.

An improved drive system for a cycle comprising a first big crank gear wheel mounted on one side of a pedal crank axle, a first small free gear wheel mounted on the rear wheel hub on the same side, a clutch arrangements attached on the said first big crank gear wheel the said first big crank gear wheel and the said first small free gear wheel being connected with a first chain, a second small crank gear wheel mounted on the other side of the said pedal crank axle, a second big free gear wheel mounted on the rear wheel hub on the same other side, the said second small crank gear wheel and the said second big free gear wheel being connected by a second chain and a means for operating the said clutch arrangement.

(Comp. 6 Pages;

Drgs. 2 Sheets.)

#### OPPOSITION PROCEEDINGS

(1)

An opposition has been entered by Research Designs and Standards Organisation to the grant of a patent on application No. 148536 made by Robert Vivion.

(2)

An opposition has been entered by Research Designs and Standards Organisation to the grant of a patent on application No. 148584 made by Pandrol Limited.

(3)

The opposition entered by Belpahar Refractories Limited to the grant of a patent on application No. 142933 made by Orissa Cement Limited as notified in Part-III, Section 2 of the Gazette of India, dated the 29th April, 1978 has been allowed and the grant of a patent on the application refused.

#### PATENTS SEALED

146653 147945 147946 147956 148025 148082 148228 148255  
148338 148398 148401 148403 148404 148405 148406 148407  
148411 148414 148415 148417 148419 148420 148421 148423  
148426 148430 148432 148434 148444 148447 148448 148449  
148455 148456 148457 148458 148572

#### REGISTRATION OF ASSIGNMENTS, LICENCES, ETC. (PATENTS)

Assignments, licences or other transactions affecting the interests of the original patentees have been registered in the following cases. The number of each case is followed by the names of the parties claiming interests :—

142502—M/s. Northern Engineering Industries Ltd.

PATENTS DEEMED TO BE ENDORSED WITH THE WORDS "LICENCES OF RIGHT"

The following patents are deemed to have been endorsed with the words "Licences of right" under Section 87 of the Patents Act, 1970. The dates shown in the crescent brackets are the dates of the patents.

No.	Title of the invention
142210 (05.09.74)	Process for the production of coated aluminium or aluminium based alloy products.
142368 (30.11.76)	An improved method for the production of sponge iron and a rotary kiln for producing the same.
143012 (20.11.74)	A process for the manufacture of N, N, N', N'-tetraphenyl diamino methane.
143025 (05.11.75)	Demethylation of aminoglycoside antibiotic.
143028 (11.09.74)	Method of making RD diamond particles.
143036 (03.09.74)	Process for preparing chromium containing catalysts useful for oxidation reaction.
143060 (02.01.75)	A process for preparing phosphorous hydride resistant to spontaneous inflammability in presence of moisture.
143068 (18.03.75)	Method and apparatus for the continuous condensation of a gaseous mixture of ammonia, carbon dioxide and water vapour.
13126 (17.10.74)	Process for preparing 1-amino benzene 5-β-sulfato ethyl sulfone-2, 4-di sulfonic acid the 5-vinyl sulfone compound and the alkali salts thereof.
143136 (01.01.76)	A process of preparing a reagent for the detection of human chorionic gonadotropin in urine.
145215 (29.10.75)	Process for producing electromagnetic silicon steel.

## RENEWAL FEES PAID

107144 107419 107433 107475 107579 107619 107644 107683  
 108013 108221 108531 108770 112446 112569 112685 112727  
 112789 112813 113068 113223 113286 114069 115489 116941  
 117839 117879 117889 117904 117916 117931 117945 117961  
 118014 118146 118170 118196 118335 118367 118379 118604  
 118606 118669 118742 118834 118884 118974 118975 119031  
 123243 123330 123331 123332 123354 123421 123453 123486  
 123504 123509 123641 123748 124090 124140 127635 128403  
 128546 128603 128683 128699 128758 128839 128846  
 128920 129043 129045 129127 129139 129184 129290 130751  
 132991 133070 133168 133173 133234 133299 133391 133382  
 133384 133612 135495 135880 136205 136343 136584 136715  
 136819 136919 137061 137079 137395 137698 137736 137828  
 137862 137863 137977 137980 138183 138214 138215 138242  
 138292 138341 138432 138458 138725 138742 138774 139152  
 139287 139290 139815 140133 140185 140222 140266 140278  
 140411 140620 140672 140684 140743 140995 141139 141310  
 141846 141856 142084 142426 142728 142749 142809 142839  
 142909 142975 143109 143184 143192 143284 143367  
 143321 143563 143641 143785 144551 144684 144695 144863  
 144939 145079 145177 145439 145629 145635 145674 145726  
 145752 145790 145800 145975 145977 146033 146301 146347  
 146348 146385 146654 146778 146792 147467 147471 147666  
 147711 147772 147869 147912 147957 147965 148130 148188  
 148263 148268

## CESSATION OF PATENTS

98973 98986 99008 99033 99069 99107 99133 99152 120117  
 128870 132641 140394 145570 145654 147247

## RESTORATION PROCEEDINGS

(1)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 111300 granted to Jahar Lal Bose for an invention relating to "Valveless filter".

The patent ceased on the 28th June, 1980 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part III, Section 2 dated, the 23rd May, 1981. Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-17 on or before the 24th December 1981 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

(2)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 124818 granted to ELI LILLY AND COMPANY for an invention relating to "pesticides containing substituted-5-pyrimidine compounds".

The patent ceased on the 18th April, 1980 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part III, Section 2 dated the 1st August, 1981. Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-17 on or before the 24th December 1981 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

(3)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 135954 granted to Shyam Sundar Ghosh for an invention relating to "Process for making of zircon-based abrasion resistant tiles, bricks, mould liners and the like and the articles made thereby".

The Patent ceased on the 27th April, 1980 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part III, Section 2 dated the 9th May, 1981. Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-17 on or before the 24th December 1981 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

(4)

Notice is hereby given that an application was made under Section 60 of the Patents Act, 1970 for the restoration of Patent No. 135200 granted to F. L. Smidth & Co. A/S for an invention relating to "coolers for rotary kilns".

The patent ceased on the 7th April, 1980 due to non-payment of renewal fees within the prescribed time and the cessation of the patent was notified in the Gazette of India, Part III, Section 2 dated the 9th May, 1981. Any interested person may give notice of opposition to the restoration by leaving a notice on Form 32 in duplicate with the Controller of Patents, The Patent Office, 214, Acharya Jagadish Bose Road, Calcutta-17 on or before the 24th December 1981 under Rule 69 of the Patents Rules, 1972. A written statement in triplicate setting out the nature of the Opponent's interest, the facts upon which he bases his case and the relief he seeks, shall be filed with the notice or within one month from the date of the notice.

(5)

Notice is hereby given that an application for restoration of Patent No. 125754 dated the 16th March, 1970 made by Clayton Dewandre Company Limited on the 4th January, 1980 and notified in the Gazette of India, Part-III, Section 2 dated the 14th June, 1980 has been allowed and the said patent restored.

(6)

Notice is hereby given that an application for restoration of Patent No. 137168 dated the 27th January, 1973 made by Jawa. Narodni Podnik on the 3rd September, 1980 and notified in the Gazette of India, Part-III, Section 2 dated the 21st March, 1981 has been allowed and the said patent restored.

(7)

Notice is hereby given that an application for restoration of Patent No. 142818 dated the 28th January, 1976 made by The Parker Pen Company on the 5th December, 1979 and notified in the Gazette of India, Part-III, Section 2 dated the 3rd May, 1980 has been allowed and the said patent restored.

(8)

Notice is hereby given that an application for restoration of Patent No. 143259 dated the 4th May, 1976 made by Ratilal Narottamdas Panchal on the 31st December, 1979 and notified in the Gazette of India, Part-III, Section 2 dated the 9th August, 1980 has been allowed and the said patent restored.

(9)

Notice is hereby given that an application for restoration of Patent No. 146413 dated the 11th October, 1976 made by Solo Industries Pty Limited on the 24th May, 1980 and notified in the Gazette of India, Part-III, Section 2 dated the 8th November, 1980 has been allowed and the said patent restored.

#### REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class. 1. No. 150156. Sylvex Metal Industries of 20, Municipal Industrial Estate, Vile Parle (West), Bombay-400056, Maharashtra, an Indian Sole Proprietary Firm. "Button". November 26, 1980.

Class. 1. No. 150263. Devinder Electrical & Mechanical Engineers (India), of G-1, Model Town, Delhi-110009. "Battery Terminal". December 31, 1980.

Class. 1. No. 150282. Geetha Industries, a Proprietary Firm of 120 first floor, Nagrathpet, Bangalore-560002, Karnataka, India. "Tiffin Carrier". January 6, 1981.

Class. 1. No. 150302. Guru Enterprises, a partnership firm of 49, Hemkunt, New Delhi-110048, India. "Door Lock". January 16, 1981.

Class. 1. No. 150447. Sheraton & Company, a Regd. Partnership Firm, of 131, Nagindas Master Road, Fort, Bombay-400023, Maharashtra. "Frame of a sofa cum-bed". February 20, 1981.

Class. 1. No. 150518. Tilak Light House of 11/71, Tilak Nagar, New Delhi, an Indian Partnership Concern. "Handle Bracket to be fixed with Pressure Cooker". March 11, 1981.

Class. 3. No. 150300. Dipty Lal Judge Mal of 19, Rajasthani Udyog Nagar, G. T. Karnal Road, Delhi-110033, an Indian Partnership Concern. "Multipurpose Revolving Pots". January 15, 1981.

Class. 3. No. 150533. Asian Advertisers of 20, Kala Bhavan, 3, Mathew Road, Opera House, Bombay-400004, Maharashtra, an Indian Partnership Firm. "Pen Stand". March 16, 1981.

Class. 3. No. 150538. Ossa Products of 13, Aziz Estate, 286-B, S. G. Barve Marg, Kurla West, Bombay-400070, State of Maharashtra, India, a partnership firm. "A cap for bottle". March 17, 1981.

Class. 3. No. 150541. Meenu Equipments, an Indian Partnership Firm of Site No. 2, Balaji Nagar, Avarampalayam Road, Pappanaickenpalayam, Coimbatore-641018, Tamil Nadu, India. "A Mixer". February 21, 1981.

Class. 3. No. 150450. Meenu Equipments, an Indian Partnership Firm of Site No. 2, Balaji Nagar, Avarampalayam Road, Pappanaickenpalayam, Coimbatore-641018, Tamil Nadu, India. "A Mixer". February 21, 1981.

Class. 3. No. 150658. Azad Brush Company, a Partnership firm of Madhavdas Pasta Road, Dadar, Bombay-400014, State of Maharashtra, India. "Top cover for tooth brush-cum-hanger". April 9, 1981.

Class. 3. No. 150659. Azad Brush Company, a partnership firm of Madhavdas Pasta Road, Dadar, Bombay-400014, State of Maharashtra, India. "Tooth Brush with top cover". April 9, 1981.

Class. 3. No. 150660. Bata India Limited of 30, Shakespeare Sarani, Calcutta, West Bengal, India. "A sole for the footwear". April 9, 1981.

Class. 3. No. 150661. Bata India Limited of 30, Shakespeare Sarani, Calcutta, West Bengal, India. "A sole for the footwear". April 9, 1981.

Class. 3. No. 150662. Bata India Limited of 30, Shakespeare Sarani, Calcutta, West Bengal, India. "A sole for the footwear". April 9, 1981.

Class. 3. No. 150374. Nabi Dad Khan, Indian of 199, Chandney Chowk Market, Calcutta-700072, West Bengal, India. "Stereo Box". February 6, 1981.

*Cancellation of the Registration of Design by High Court Section 51A.*

Registration of Design No. 145258 has been cancelled by order of Hon'ble Justice G. C. Jain of Delhi High Court in Sult C.O. 8 of 1977.

S. VEDARAMAN,

Controller General of Patents, Designs and Trade Marks.